

IN THE CLAIMS:

Please cancel claims 28-35 without prejudice or disclaimer of subject matter.

Please amend claims 5, 6, 7, 22, and 23 as follows:

1. (Previously Presented) An electron-emitting device comprising:

 (A) fiber comprising carbon as a main ingredient; and

 (B) a layer including a metal-oxide semiconductor, wherein the metal-oxide thereof is selected from the group consisting of titanium oxide, zirconium oxide, and niobium oxide,

 wherein the fiber comprising carbon as a main ingredient is disposed on the layer and the fiber comprising carbon as a main ingredient partially contains Pd.
2. (Original) The electron-emitting device according to claim 1, wherein the Pd is disposed at a position where the fiber comprising carbon as a main ingredient is in contact with the layer.
3. (Original) The electron-emitting device according to claim 1, wherein the Pd is disposed on an end of the fiber comprising carbon as a main ingredient or on an intermediate point of the fiber comprising carbon as a main ingredient.

4. (Original) The electron-emitting device according to claim 1, wherein the fiber comprising carbon as a main ingredient is grown via Pd particles disposed on the layer.

5. (Currently Amended) The electron-emitting device according to claim 1, wherein the fiber comprising carbon as a main ingredient includes a ~~graphen~~ graphene.

6. (Currently Amended) The electron-emitting device according to claim 1, wherein the fiber comprising carbon as a main ingredient includes a plurality of layered ~~graphens~~ graphenes.

7. (Currently Amended) The electron-emitting device according to claim 6, wherein the plurality of ~~graphens~~ graphenes is layered in an axial direction of the fiber comprising carbon as a main ingredient.

8. (Previously Presented) The electron-emitting device according to claim 1, wherein the fiber comprising carbon as a main ingredient includes graphite nanofiber, a carbon nanotube, or an amorphous carbon, or a mixture thereof.

9. (Previously Presented) The electron-emitting device according to claim 1, further comprising:

a first electrode disposed on a surface of a substrate;

a second electrode disposed on the surface of the substrate and spaced apart from the first electrode; and

means for applying a potential higher than a potential applied to the first electrode, to the second electrode,

wherein at least a part of the layer is disposed on the first electrode.

10. (Original) The electron-emitting device according to claim 9, wherein the first electrode is larger in thickness than the second electrode.

11. (Original) The electron-emitting device according to claim 9, wherein the fiber comprising carbon as a main ingredient is disposed farther than the second electrode from the surface of the substrate.

12. (Original) The electron-emitting device according to claim 9, wherein the surface of the substrate has a step height such that the first electrode is higher than the second electrode.

13. (Previously Presented) An electron source comprising a plurality of electron-emitting devices,

wherein each electron-emitting device is an electron-emitting device according to any one of claims 1 to 12.

14. (Previously Presented) An image-forming apparatus comprising:
an electron source according to claim 13; and
an anode with which an electron emitted from the electron source comes
into collision.

15. (Original) The image-forming apparatus according to claim 14,
wherein the anode has a phosphor.

16. (Previously Presented) An electron-emitting device comprising:
(A) first and second electrodes disposed with a gap on a surface of a
substrate;
(B) a plurality of fibers each comprising carbon as a main ingredient
electrically connected with the first electrode;
(C) means for applying a voltage higher than a voltage applied to the first
electrode, to the second electrode,

wherein ends of the plurality of fibers each comprising carbon as a main
ingredient are higher than a surface of the second electrode from the surface of the
substrate; and

(D) a layer including a metal-oxide semiconductor, wherein the metal-oxide
thereof is selected from the group consisting of titanium oxide, zirconium oxide, and

niobium oxide, the layer being disposed between the first electrode and the plurality of fibers each comprising carbon as a main ingredient.

17. (Original) The electron-emitting device according to claim 16, wherein the layer and the plurality of fibers each comprising carbon as a main ingredient are connected to each other via a catalyst material.

18. (Previously Presented) The electron-emitting device according to claim 17, wherein the catalyst material is a material selected from the group consisting of Pd, Ni, Fe, Co, and an alloy of these.

19. (Original) The electron-emitting device according to claim 16, wherein the first electrode is larger in thickness than the second electrode.

20. (Previously Presented) An electron source comprising a plurality of arranged electron-emitting devices,

wherein each electron-emitting device is an electron-emitting device according to any one of claims 16 to 19.

21. (Previously Presented) An image-forming apparatus comprising:
an electron source; and

an image-forming member;

wherein the electron source is an electron source according to claim 20.

22. (Currently Amended) An electron-emitting device comprising:

(A) fiber comprising carbon as a main ingredient; and

(B) a layer including a metal-oxide semiconductor, wherein the metal-oxide thereof is selected from the group consisting of titanium oxide, zirconium oxide, and niobium oxide,

wherein the fiber comprising carbon as a main ingredient is disposed on the layer, and

the fiber comprising carbon as a main ingredient includes a plurality of layered ~~graphens~~ graphenes.

23. (Currently Amended) The electron-emitting device according to claim 22, wherein the plurality of ~~graphens~~ graphenes are layered in an axial direction of the fiber comprising carbon as a main ingredient.

24. (Original) The electron-emitting device according to claim 22, wherein the fiber comprising carbon as a main ingredient is grown via Pd particles disposed on the layer.

25. (Original) The electron-emitting device according to claim 22, wherein the fiber comprising carbon as a main ingredient contains Pd.

26. (Previously Presented) An electron source comprising a plurality of electron-emitting devices, wherein each electron-emitting device is an electron-emitting device according to any one of claims 22 to 25.

27. (Previously Presented) An image-forming apparatus,
the apparatus comprising an electron source and an image-forming member,
wherein the electron source is an electron source according to claim 26.

28.- 35. (Cancelled)

36. (New) An electron-emitting device comprising:

(A) a fiber comprising carbon; and
(B) a layer including a metal-oxide semiconductor, wherein a metal-oxide thereof is selected from the group consisting of titanium oxide, zirconium oxide and niobium oxide,

wherein the fiber is disposed on the layer.

37. (New) An electron-emitting device comprising:

(A) a plurality of fibers each comprising carbon; and

(B) a layer including a metal-oxide semiconductor, wherein a metal-oxide thereof is selected from the group consisting of titanium oxide, zirconium oxide and niobium oxide,

wherein the fibers are disposed on the layer.

38. (New) The electron-emitting device according to claim 36 or 37, wherein the fiber comprises a plurality of graphenes.

39. (New) The electron-emitting device according to claim 36 or 37, wherein the plurality of graphenes are stacked in an axial direction of the fiber.

40. (New) An electron source comprising a plurality of electron-emitting devices, wherein each electron-emitting device is an electron-emitting device according to claim 36 or 37.

41. (New) An image-forming apparatus comprising an electron source and a light-emitting member which emits light by irradiation of electrons emitted from the electron source, wherein the electron source is an electron source according to claim 40.